California Dairy Industry

Situation and Outlook

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California Monthly Milk Production

![Graph showing monthly milk production from Jan-12 to Jul-16 with a notable increase and decrease pattern, circled period highlights a significant peak in July to August 2014.]
California Milk Price
Number of California Dairy Farms

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,752</td>
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<tr>
<td>2010</td>
<td>1,715</td>
</tr>
<tr>
<td>2011</td>
<td>1,668</td>
</tr>
<tr>
<td>2012</td>
<td>1,563</td>
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<tr>
<td>2013</td>
<td>1,496</td>
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<tr>
<td>2014</td>
<td>1,470</td>
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<tr>
<td>2015</td>
<td>1,438</td>
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<tr>
<td>2016</td>
<td>1,385</td>
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</tbody>
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Location of Milk Supply

- Geographic footprint of milk is getting smaller and more concentrated in the Central Valley
- Top eight counties are all in the middle one-third of the state
- Eight counties produce 90% of California’s milk
Where the dairy industry is hot and not

YTD 2016 Milk Production
Outlook for Dairy

- In two short years, the California dairy industry has completely changed
  - For decades, the industry struggled with balancing abundant milk supplies with processing capacity
  - Critical times for balancing milk supplies:
    - February through May
    - Thanksgiving to New Year’s
  - Starting in late 2015, the opposite problem emerged, i.e., finding enough milk to keep assets running
Outlook for Dairy

• The foundation of the dairy industry is built on dairy farms and milk
• Three related and dependent sectors:
  • Farms to produce feed (many located out of state)
  • Milk processing plants to produce (and sell) dairy products
  • Affiliated businesses that are economically viable
• Widespread and growing concern about the alarming trends seen on the dairy farm side
• Dairy farms are just responding to economic signals and pressures
Outlook for Dairy

• What has changed in the last five to ten years?
  • Milk price stability has been altered as government involvement has decreased
  • Emergence of diversified operations – operate dairy farm but with some additional farming – reduces risk
  • Permanent crops were proven to be effective against down years for the dairy farm
• Environmental restrictions have been building over a period of years
  • Dairy farms and milk processing plants do not have the exemptions that they used to have
Outlook for Dairy

- What do the indicators suggest now?
  - Milk supplies will become less available in CA
  - Will have a stable and fixed asset base for milk processing
  - Increased competition – processing plants will be forced to be locked in milk supplies
  - Greater interest in having direct shippers instead of buying milk from a cooperative
  - Dairy cooperatives are expected to be competitive with other milk buyers
Outlook for Dairy

• Why are dairy coops important in CA?
• Historically, about 80% of CA milk has been marketed by dairy cooperatives
• Relevancy of milk marketing cooperatives?
• Keys to remaining relevant:
  • Continue to perform with good returns on capital investments
  • Offer services that cannot be found elsewhere
  • Consolidate to strengthen cooperative influence
Outlook for Dairy

- Survivability of dairy farming in CA
  - Must adapt to a different model than what grew the industry for decades
    - The next five years will not resemble the last five years
    - International markets have not proven to be predictably “good” for milk processors
  - Increased regulations for ag in general
    - Dairy industry will have additional regulatory problems to solve
Outlook for Dairy

• Survivability of dairy farming in CA (con’d.)
  • More competition for land, water and labor from other industries
    • Works well for dairies seeking options
    • Does not bode well for new dairy construction
  • On-farm margins will improve as competition for milk supplies heat up
  • Must be receptive to an increasingly inquisitive consumer base – “How is my food produced?”
  • For dairy farms that adapt, the future is bright